In the Claims

Claims 5-6, 9, 17, 20-21, 29, 33, 44 and 47 have been amended and Claims 51-67 have been added as follows:

1. (Original) A glass package comprising:

a first glass plate;

a second glass plate; and

a frit made from glass that was doped with at least one transition metal and a coefficient of thermal expansion (CTE) lowering filler, wherein said frit was heated by a irradiation source in a manner that caused said frit to melt and form a hermetic seal which connects said first glass plate to said second glass plate.

2. (Original) The glass package of Claim 1, wherein each of said first and second glass plates absorbs less light from said irradiation source when compared to light absorbed by said frit from said irradiation source.

3. (Original) The glass package of Claim 1, wherein said frit has a softening temperature that is lower than the softening temperatures of said first and second glass plates.

4. (Original) The glass package of Claim 1, wherein said frit has a CTE that substantially matches the CTEs of said first and second glass plates.

5. (Currently Amended) The glass package of Claim 1, wherein said <u>CTE lowering</u> filler is an inversion filler.

6. (Currently Amended) The glass package of Claim 1, wherein said <u>CTE lowering</u> filler is an additive filler.

7. (Original) The glass package of Claim 1, wherein said frit is a low temperature glass frit containing one or more absorbing ions chosen from the group including iron, copper, vanadium, and neodymium.

8. (Original) The glass package of Claim 1, wherein said frit excluding the CTE lowering filler has the following composition:

K_2O (0-10 mole %)
Fe_2O_3 (0-20 mole %)
Sb_2O_3 (0-40 mole %)
P_2O_5 (20-40 mole %)
V_2O_5 (30-60 mole %)
TiO_2 (0-20 mole %)
Al_2O_3 (0-5 mole %)
B_2O_3 (0-5 mole %)
WO_3 (0-5 mole %)
Bi_2O_3 (0-5 mole %).

9. (Currently Amended) The glass package of Claim 1, wherein said frit excluding the CTE lowering filler has the following composition:

K_2O (0-10 mole %)
Fe_2O_3 (0-20 mole %)
Sb_2O_3 (0-20 mole %)
ZnO (0-20 mole %)
P_2O_5 (20-40 mole %)
V_2O_5 (30-60 mole %)
TiO_2 (0-20 mole %)
Al_2O_3 (0-5 mole %)
B_2O_3 (0-5 mole %)
WO_3 (0-5 mole %)
Bi_2O_3 (0-5 mole %).

10. (Original) The glass package of Claim 1, wherein said frit is selected from one of the frits listed in TABLES 1-5.

11. (Original) A method for manufacturing a hermetically sealed glass package, said method comprising the steps of:

providing a first glass plate;

providing a second glass plate;

depositing a frit made from glass doped with at least one transition metal and a coefficient of thermal expansion (CTE) lowering filler onto said second glass plate; and

heating said frit in a manner that would cause said frit to soften and form a hermetic seal which connects said first glass plate to said second glass plate.

12. (Original) The method of Claim 11, further comprising the step of placing an adhesive within a gap located between outer edges of said first and second glass plates, wherein said gap is caused by the presence of the hermetic seal.

13. (Original) The method of Claim 11, further comprising the step of pre-sintering said frit to said second glass plate before said heating step.

14. (Original) The method of Claim 11, wherein said heating step further includes using a laser to emit a laser beam that heats said frit.

15. (Original) The method of Claim 14, wherein said frit has an enhanced absorption property within an infrared region and said laser beam has a wavelength in the infrared region such that when said laser beam interacts with said frit substantially more heat energy is absorbed by said frit from said laser beam when compared to the heat energy absorbed by each of said first and second glass plates.

16. (Original) The method of Claim 11, wherein said heating step further includes using an infrared lamp to emit a light that heats said frit.

17. (Currently Amended) The method of Claim 16, wherein said frit has an enhanced absorption property within an infrared region and said light has a wavelength in the infrared region such that when said light interacts with said frit substantially more heat energy is absorbed by said frit from said light when compared to the heat energy absorbed by each of said first and second substrate plates.

18. (Original) The method of Claim 11, wherein said frit has a softening temperature that is lower than softening temperatures of said first and second glass plates.

19. (Original) The method of Claim 11, wherein said frit has a CTE that substantially matches the CTEs of said first and second glass plates.

20. (Currently Amended) The method of Claim 11, wherein said CTE lowering filler is an inversion filler.

21. (Currently Amended) The method of Claim 11, wherein said CTE lowering filler is an additive, filler including lithium alumino-silicate compounds ~~such as beta-eucryptite~~.

22. (Original) The method of Claim 11, wherein said frit is a low temperature glass frit containing one or more absorbing ions chosen from the group including iron, copper, vanadium, and neodymium.

23. (Original) The method of Claim 11, wherein said frit excluding the CTE lowering filler has the following composition:

K_2O (0-10 mole %)
Fe_2O_3 (0-20 mole %)
Sb_2O_3 (0-40 mole %)
P_2O_5 (20-40 mole %)
V_2O_5 (30-60 mole %)
TiO_2 (0-20 mole %)
Al_2O_3 (0-5 mole %)
B_2O_3 (0-5 mole %)
WO_3 (0-5 mole %)
Bi_2O_3 (0-5 mole %).

24. (Original) The method of Claim 11, wherein said frit excluding the CTE lowering filler has the following composition:

K_2O (0-10 mole %)
Fe_2O_3 (0-20 mole %)
Sb_2O_3 (0-20 mole %)

ZnO (0-20 mole %)
P_2O_5 (20-40 mole %)
V_2O_5 (30-60 mole %)
TiO_2 (0-20 mole %)
Al_2O_3 (0-5 mole %)
B_2O_3 (0-5 mole %)
WO_3 (0-5 mole %)
Bi_2O_3 (0-5 mole %).

25. (Original) The method of Claim 11, wherein said frit is selected from one of the frits listed in TABLES 1-5.

26. (Original) An organic light emitting diode device having at least one organic light emitting diode located between two plates connected to one another by a hermetic seal formed from a frit that was heated by an irradiation source in a manner that caused said frit to melt and form the hermetic seal while at the same time avoiding thermal degradation of said at least one organic light emitting diode, wherein said frit is a glass that was doped with at least one transition metal and a coefficient of thermal expansion (CTE) lowering filler.

27. (Original) The organic light emitting diode device of Claim 26, wherein said two plates are two glass plates each of which absorbs less heat energy from said heating mechanism when compared to the heat energy absorbed by said frit from said irradiation source.

28. (Original) The organic light emitting diode device of Claim 26, wherein said irradiation source is a laser or an infrared lamp.

29. (Currently Amended) The organic light emitting diode device of Claim 26, wherein said CTE lowering filler is an inversion filler or an additive filler.

30. (Original) The organic light emitting diode device of Claim 26, wherein said organic light emitting diode device is a display.

31. (Original) An organic light emitting diode display comprising:

a first substrate plate;

at least one organic light emitting diode;

a second substrate plate; and

a frit made from glass that was doped with at least one transition metal and a coefficient of thermal expansion (CTE) lowering filler, wherein said frit was heated by an irradiation source in a manner that caused said frit to soften and form a hermetic seal which connects said first substrate plate to said second substrate plate and also protects said at least one organic light emitting diode located between said first substrate plate and said second substrate plate.

32. (Original) The organic light emitting diode device of Claim 31, wherein each of said first and second substrate plates is a glass plate that absorbs less heat energy from said irradiation source when compared to heat energy absorbed by said frit from said irradiation source.

33. (Currently Amended) The organic light emitting diode device of Claim 31, wherein said <u>CTE lowering</u> filler is an inversion filler or an additive filler ~~including lithium alumino-silicate compounds such as beta-eucryptite~~.

34. (Original) The organic light emitting diode device of Claim 31, wherein said frit is a low temperature glass frit containing one or more absorbing ions chosen from the group including iron, copper, vanadium, and neodymium.

35. (Original) The organic light emitting diode device of Claim 31, wherein said frit excluding the CTE lowering filler has the following composition:

K_2O (0-10 mole %)
Fe_2O_3 (0-20 mole %)
Sb_2O_3 (0-40 mole %)
P_2O_5 (20-40 mole %)
V_2O_5 (30-60 mole %)
TiO_2 (0-20 mole %)
Al_2O_3 (0-5 mole %)
B_2O_3 (0-5 mole %)
WO_3 (0-5 mole %)

Bi_2O_3 (0-5 mole %).

36. (Original) The organic light emitting diode device of Claim 31, wherein said frit is selected from one of the frits listed in TABLES 1-5.

37. (Original) A method for manufacturing an organic light emitting diode device, said method comprising the steps of:

providing a first substrate plate;

providing a second substrate plate;

depositing a frit made from glass doped with at least one transition metal and a coefficient of thermal expansion (CTE) lowering filler onto one of said substrate plates; and

depositing at least one organic light emitting diode onto one of said substrate plates; and

heating and then cooling said frit in a manner that would cause said frit to melt and form a hermetic seal which connects said first substrate plate to said second substrate plate and also protects said at least one organic light emitting diode.

38. (Original) The method of Claim 37, further comprising the step of placing an adhesive within a gap located between outer edges of said first and second substrate plates, wherein said gap is caused by the presence of the hermetic seal.

39. (Original) The method of Claim 37, further comprising the step of pre-sintering said frit to said one of the substrate plates before said heating step.

40. (Original) The method of Claim 37, wherein said heating step is performed at a temperature which causes said frit to melt and form the hermetic seal while at the same time avoiding damage to said at least one organic light emitting diode.

41. (Original) The method of Claim 37, wherein said heating step further includes using a laser to emit a laser beam that heats said frit.

42. (Original) The method of Claim 41, wherein said frit has an enhanced absorption property within an infrared region and said laser beam has a wavelength in the infrared region such that when said laser beam

interacts with said frit substantially more heat energy is absorbed by said frit from said laser beam when compared to the heat energy absorbed by each of said first and second substrate plates.

43. (Original) The method of Claim 37, wherein said heating step further includes using an infrared lamp to emit a light that heats said frit.

44. (Currently Amended) The method of Claim 43, wherein said frit has an enhanced absorption property within an infrared region and said light has a wavelength in the infrared region such that when said light interacts with said frit substantially more heat energy is absorbed by said frit from said light when compared to the heat energy absorbed by each of said first and second substrate plates.

45. (Original) The method of Claim 37, wherein said frit has a softening temperature that is lower than softening temperatures of said first and second substrate plates.

46. (Original) The method of Claim 37, wherein said frit has a CTE that substantially matches the CTEs of said first and second substrate plates.

47. (Currently Amended) The method of Claim 37, wherein said CTE lowering filler is an inversion filler or an additive filler.

48. (Original) The method of Claim 37, wherein said frit is a low temperature glass frit containing one or more absorbing ions chosen from the group including iron, copper, vanadium, and neodymium.

49. (Original) The method of Claim 37, wherein said frit excluding the CTE lowering filler has the following composition:

K_2O (0-10 mole %)
Fe_2O_3 (0-20 mole %)
Sb_2O_3 (0-40 mole %)
P_2O_5 (20-40 mole %)
V_2O_5 (30-60 mole %)
TiO_2 (0-20 mole %)
Al_2O_3 (0-5 mole %)
B_2O_3 (0-5 mole %)

WO_3 (0-5 mole %)
Bi_2O_3 (0-5 mole %).

50. (Original) The method of Claim 37, wherein said frit is selected from one of the frits listed in TABLES 1-5.

51. (New) A frit made from glass that was doped with at least one transition metal and a coefficient of thermal expansion (CTE) lowering filler.

52. (New) The frit of Claim 51, wherein said CTE lowering filler is an inversion filler.

53. (New) The frit of Claim 51, wherein said CTE lowering filler is an additive filler.

54. (New) The frit of Claim 53, wherein said additive filler includes lithium alumino-silicate compounds.

55. (New) The frit of Claim 53, wherein said additive filler includes beta-eucryptite.

56. (New) The frit of Claim 51, wherein said at least one transition metal is selected from the group including iron, copper, vanadium, and neodymium.

57. (New) The frit of Claim 51, wherein said doped glass excluding the CTE lowering filler has the following composition:

K_2O (0-10 mole %)
Fe_2O_3 (0-20 mole %)
Sb_2O_3 (0-40 mole %)
P_2O_5 (20-40 mole %)
V_2O_5 (30-60 mole %)
TiO_2 (0-20 mole %)
Al_2O_3 (0-5 mole %)
B_2O_3 (0-5 mole %)
WO_3 (0-5 mole %)
Bi_2O_3 (0-5 mole %).

58. (New) The frit of Claim 51, wherein said doped glass excluding the CTE lowering filler has the following composition:

K_2O (0-10 mole %)
Fe_2O_3 (0-20 mole %)
Sb_2O_3 (0-20 mole %)
ZnO (0-20 mole %)
P_2O_5 (20-40 mole %)
V_2O_5 (30-60 mole %)
TiO_2 (0-20 mole %)
Al_2O_3 (0-5 mole %)
B_2O_3 (0-5 mole %)
WO_3 (0-5 mole %)
Bi_2O_3 (0-5 mole %).

59. (New) The frit of Claim 51, wherein said doped glass has a composition that is listed in TABLES 1-5.

60. (New) The frit of Claim 51, wherein an irradiation source heats said doped glass to cause said doped glass to melt and form a hermetic seal which connects a first glass plate to a second glass plate.

61. (New) The frit of Claim 60, wherein each of said first and second glass plates absorbs less light from said irradiation source when compared to light absorbed by said doped glass from said irradiation source.

62. (New) The frit of Claim 60, wherein said doped glass has a softening temperature that is lower than the softening temperatures of said first and second glass plates.

63. (New) The frit of Claim 60, wherein said doped glass has a CTE that substantially matches the CTEs of said first and second glass plates.

64. (New) The frit of Claim 60, wherein said irradiation source is a laser or an infrared lamp.

65. (New) The frit of Claim 60, wherein said irradiation source emits a light to heat said doped glass and said doped glass has an enhanced absorption property within an infrared region and the light has a wavelength in the infrared region such that when the light interacts with said doped glass substantially more heat energy is absorbed by said doped glass from the light when compared to the heat energy absorbed by each of said first and second substrate plates.

66. (New) The frit of Claim 60, wherein said irradiation source emits a laser beam to heat said doped glass and said doped glass has an enhanced absorption property within an infrared region and the laser beam has a wavelength in the infrared region such that when the laser beam interacts with said doped glass substantially more heat energy is absorbed by said doped glass from the laser beam when compared to the heat energy absorbed by each of said first and second substrate plates.

67. (New) The frit of Claim 60, wherein said doped glass and said first and second substrate plates are used to make an organic light emitting diode device.